



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR(S): Takayuki GOMI; Hiroaki AMMO

ATTORNEY DOCKET NO.: 09792909-3746

SERIAL NO.: 08/965,286

GROUP ART UNIT: 2811

FILED: November 6, 1997

EXAMINER: O. Nadav

TITLE: SEMICONDUCTOR DEVICE INCLUDING HIGH SPEED TRANSISTORS  
AND HIGH VOLTAGE TRANSISTORS DISPOSED ON A SINGLE  
SUBSTRATE

RESPONSE "I" TO NON FINAL OFFICE ACTION

BOX Non Fee Amendment  
Assistant Commissioner for Patents  
Washington, D.C. 20231

S I R:

Regarding the Office Action mailed August 1, 2001, please enter the following  
amendments and consider the remarks below.

IN THE CLAIMS

Please amend claims 1, 20 and 24 and add new claims 27-29 as follows:

5

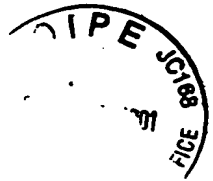
Sub  
I  
10

1. (Amended Seven Times) A semiconductor device having a first vertical type  
bipolar transistor and a second vertical type bipolar transistor having a breakdown voltage  
that is higher than a breakdown voltage of the first vertical type bipolar transistor, the  
semiconductor device comprising:  
a substrate defining a datum surface, wherein the substrate is a first conductive type  
substrate;  
an epitaxial layer formed on the substrate above the datum surface;  
a first embedded diffusion layer formed as part of a first vertical type bipolar transistor  
in a first upper part of the substrate and in the epitaxial layer;

24/I  
FJONES  
10-16-01

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OCT 17 2001  
TECHNICAL CENTER 2700

2811



SONNENSCHN, NATH & ROSENTHAL  
P.O. Box 061080  
Wacker Drive Station - Sears Tower  
Chicago, IL 60606-1080  
312/876-8000

IN RE APPLICATION OF Takayuki GOMI, et al.

OLD ATTORNEY DOCKET NO. P97,2608  
NEW ATTORNEY DOCKET NO. 09792909-3746

SERIAL NO.: 08/965,286  
FILED: November 6, 1997  
FOR: "SEMICONDUCTOR DEVICE INCLUDING HIGH SPEED TRANSISTORS AND HIGH VOLTAGE TRANSISTORS DISPOSED ON A SINGLE SUBSTRATE"

GROUP ART UNIT: 2811  
EXAMINER: O. NADAV

**RESPONSE "I" TO NON-FINAL OFFICE ACTION**

BOX Non-Fee Amendment  
Assistant Commissioner of Patents  
Washington, D.C. 20231

SIR:

Transmitted herewith is an amendment in the above-identified application.

☐ Additional claim fee is required.

The fee has been calculated as shown below.

CLAIMS AS AMENDED						
	(2) CLAIMS REMAINING AFTER AMENDMENT		(4) HIGHEST NO. PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEE
TOTAL CLAIMS	14	MINUS	20	0	( ) X 9.00 ( ) X 18.00	\$0.00
INDEP. CLAIMS	2	MINUS	3	0	( ) X 40.00 ( ) X 80.00	
Application amended to contain any multiple dependent claims not previously paid for.				( ) YES ( ) NO	( ) \$130.00 ( ) \$260.00 ONE TIME	
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00	

\* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5  
\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20 write "20" in this space.

- ☐ This is a general authorization under 37 CFR 1.136(a)(3) to treat any concurrent or future reply, requiring a petition for an extension of time for its timely submission, as incorporating a petition for extension of time for the appropriate length of time.
  - ☐ Applicant petitions the Commissioner of Patents and Trademarks under 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application to the Office Action dated \_\_\_\_\_ for \_\_\_\_ month(s) so that the period for response is extended to \_\_\_\_\_. A check in the amount of \$\_\_\_\_\_ is enclosed to cover the fee.
  - ☐ A check in the amount of \$0.00 is attached to cover the additional claim fee.
  - ☐ A check for \$\_\_\_\_\_ accompanying attached Terminal Disclaimer under 37 C.F.R. §1.321.
  - ☐ A check for \$\_\_\_\_\_ for Amendment Under 37 C.F.R. 1.312(b) is attached.
  - ☒ The Commissioner is hereby authorized to charge the extension fee and any additional fees which may be required, or to credit any overpayment to account No. 19-3140. A duplicate of this sheet is enclosed.
- When phoning re this application, please call 312/876-8000 - Ext. 12886.

SONNENSCHN NATH & ROSENTHAL  
BY Kevin W. Guynn (Reg. No. 29,927)  
Kevin W. Guynn

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to BOX Non-Fee Amendment, Assistant Commissioner of Patents, Washington, D.C. 20231 on October 2, 2001.

[Signature]  
SIGNATURE  
October 2, 2001